



Office of the Army Surgeon General

Respiratory Disease Surveillance U.S. Army

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Respiratory Disease Surveillance ***U.S. Army***

- Acute Respiratory Disease (ARD) is a leading cause of morbidity
- Military is susceptible to outbreaks, especially in basic training
- Host, agent and environmental factors combine to provide “opportunity”
- Routine surveillance of ARD among Basic Trainees since 1967



Respiratory Disease Surveillance

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- For surveillance purposes, and ARD case is defined as a trainee with all of the following:
 - Oral temperature > 100.5 F.
 - Recent onset of at least one sign or symptom of acute respiratory tract inflammation
 - Given a limited duty profile or removed from duty for at least 8 hours



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- Routine tracking of indicators of streptococcal disease activity
- Weekly calculation of:
 - Strep Recovery Rate
 - Streptococcal-ARD Surveillance Index (SASI)
- Monitor sick call at TMCs for trends in ARD



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| Name of Index | Formula | Comments |
|---|---|---|
| Strep Recovery Rate | Pos Strep Cultures Among ARD cases X 100/ Total cultures among ARD cases | Calculate weekly. Observe over time for trends |
| Strep-ARD Surveillance (SAS) Index | Strep Recovery Rate X (ARD Cases) X 100/ # Trainees | Calculate weekly. If > 25 for 2 consecutive weeks, indicates significant strep disease activity |



• *Respiratory Disease Surveillance* *U.S. Army*

- Vaccines have had remarkable success
- Trainees are given vaccines for:
 - Influenza
 - Measles
 - Rubella
 - Meningococcal disease



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- Bicillin prophylaxis administered to trainees to prevent Group A, beta-hemolytic streptococcal (GABHS) disease
- Ft. Leonard Wood reports Bicillin prophylaxis used in trainees continuously since 1996. If streptococcal disease is found within a company or battalion of recruits 4 weeks or more after the original Bicillin prophylaxis, another dose is administered to the entire company or battalion



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- Ft. Knox reports Bicillin prophylaxis has not been used since 1996, except for one outbreak of streptococcal disease among trainees
- Ft. Sill reports Bicillin prophylaxis for every trainee since 1998. They also administer a 2nd dose if strep disease is found 4 or more weeks after original dose



Respiratory Disease Surveillance U.S. Army

- Ft. Jackson reports that BP has not been used since 1998
- Ft. Benning reports BP used in trainees continuously since 1998.

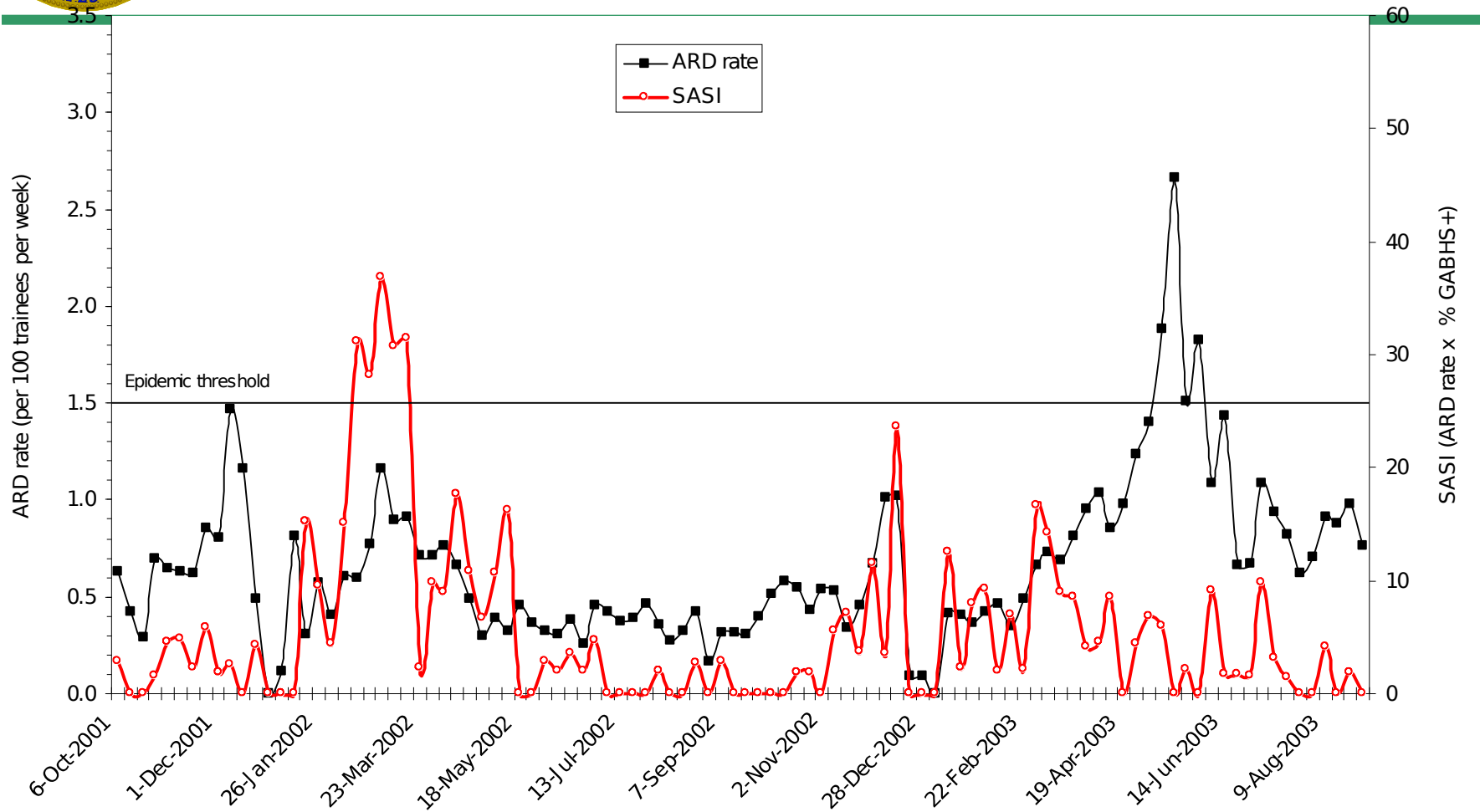


Respiratory Disease Surveillance U.S. Army

- Preventive Medicine Chiefs at BCT installations submit the Acute Respiratory Disease Surveillance Report (ARDSR) on a weekly basis
- AMSA consolidates and analyzes the ARDSR

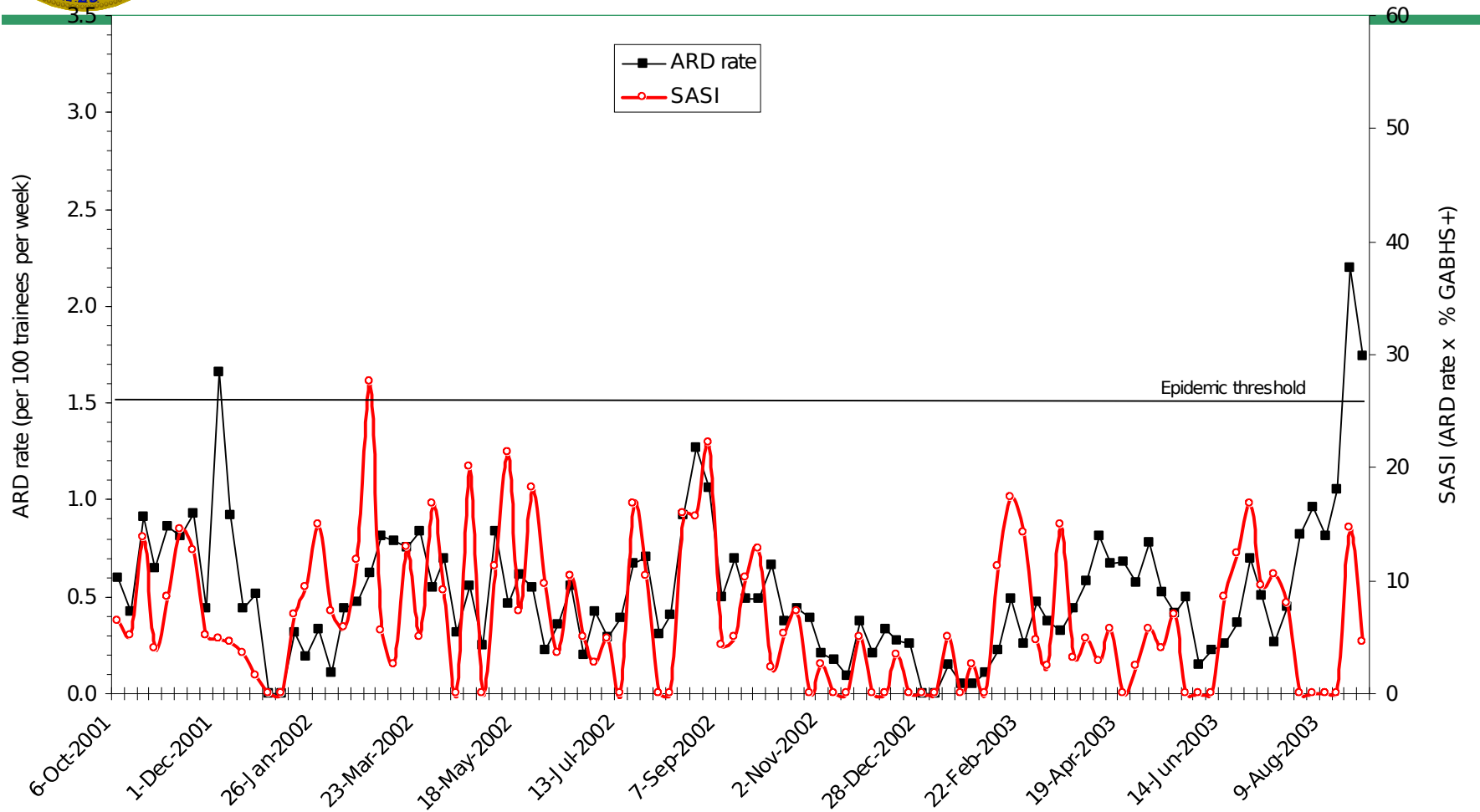


ARD and GABHS surveillance results, basic trainees, Fort Leonard Wood, Missouri



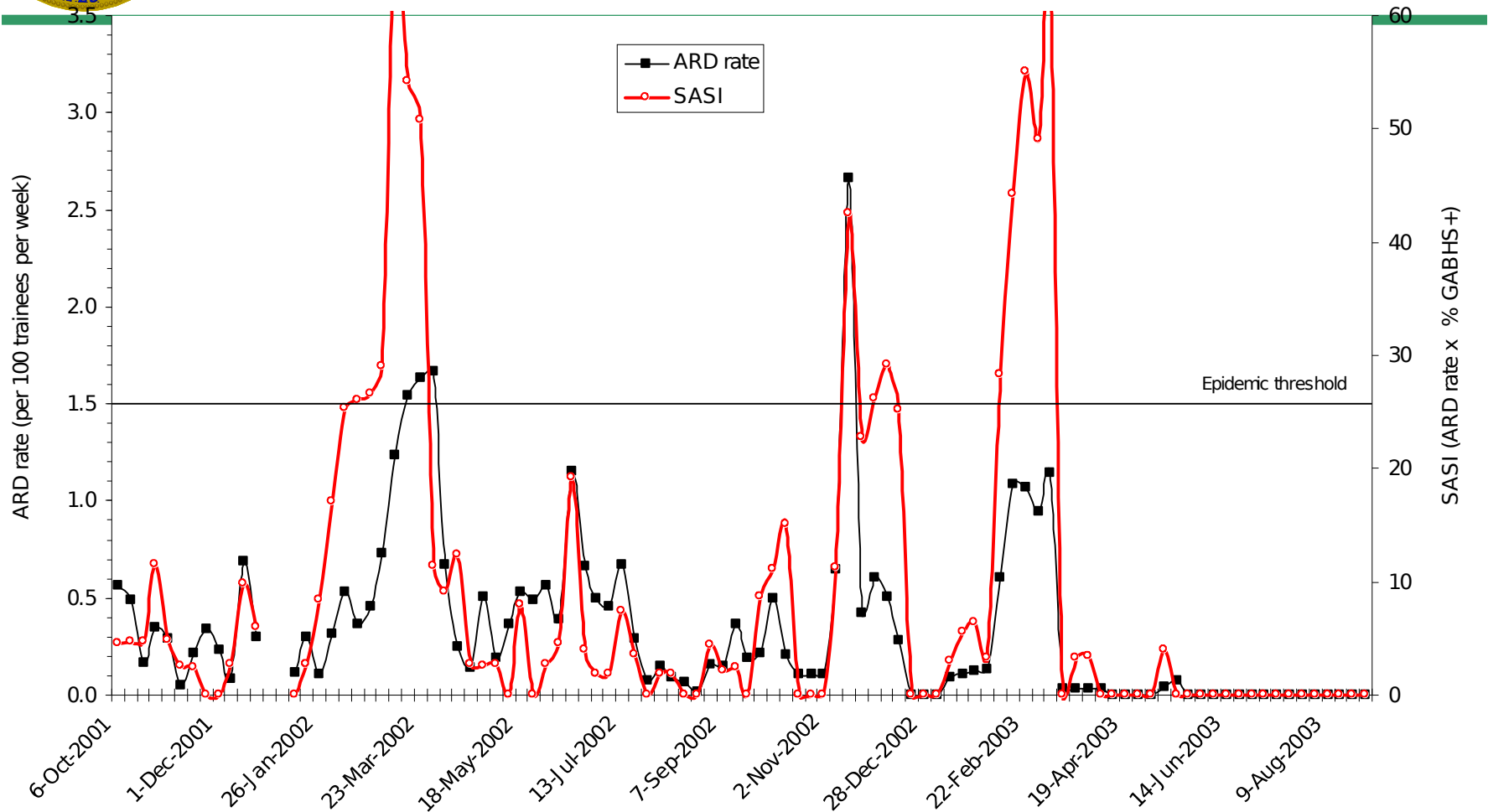


ARD and GABHS surveillance results, basic trainees, Fort Knox, Kentucky



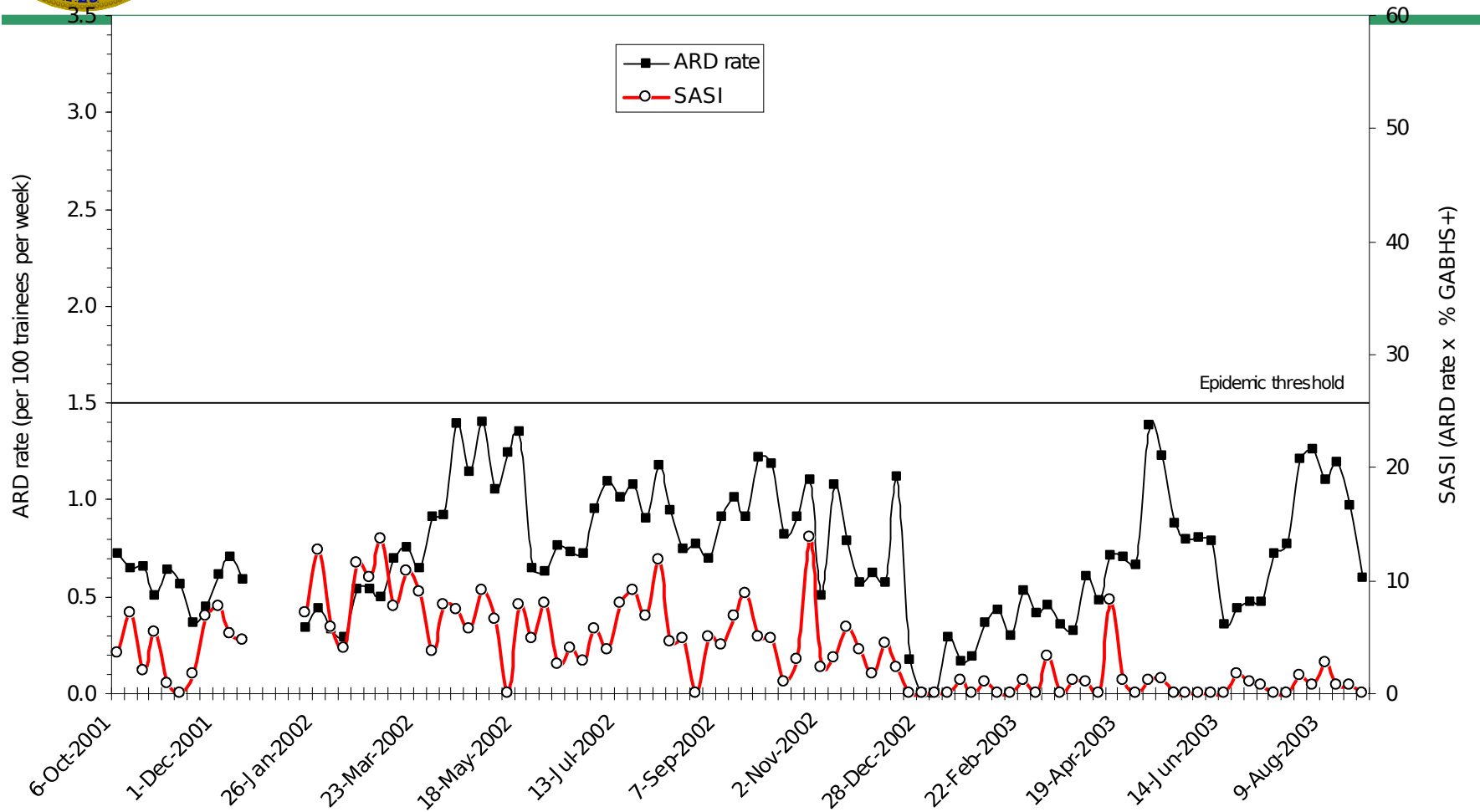


ARD and GABHS surveillance results, basic trainees, Fort Sill, Oklahoma





ARD and GABHS surveillance results, basic trainees, Fort Jackson, South Carolina





ARD and GABHS surveillance results, basic trainees, Fort Benning, Georgia

